

Fellowship Program: U.S. Nuclear Regulatory Commission Nuclear Education Program (FY2008)

The Graduate College of Boise State University proposes a sustainable graduate fellowship program for the recruitment of master's students who are committed to careers related to nuclear science and engineering (NSE). Although the university does not offer academic programs leading to traditional NSE degree titles, it offers excellent science and engineering master's programs suited to the education of graduate students interested in nuclear materials, including nuclear fuels, high temperature materials, and radiation effects on corrosion. Furthermore, nuclear materials research at Boise State (\$3.2M over the past 3 years) is connected to the broad scope of NSE research through the Center for Advance Energy Studies (CAES), a public/private partnership between the three Idaho public universities and the Idaho National Laboratory. The proposed fellowship program will award two one-year fellowships per year for four years for a total of eight NRC-funded one-year fellowships. Fellows will move onto non-NRC funded research assistantships in their second year, and will complete master's degrees at the end of that year, followed by NSE-related employment. Sustaining funding and expansion of the fellowship program will be secured by the university no later than the fifth year, when non-federal university funds assigned to the Graduate College will guarantee sustained annual funding for two fellowships, and equal funding from external organizations will form long-term partnerships for the support of additional graduate students. The result will be an ongoing expanded fellowship program with eight master's students advancing toward NSE-related careers at any given time. This pipeline of master's students is appropriately scaled to the capacities of the university in nuclear materials research, and occupies the middle ground between scholarship programs for undergraduate students and fellowship programs at mature research universities that focus on doctoral students.